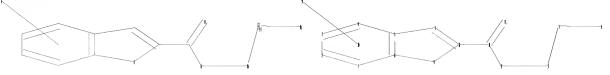
=>

Uploading C:\Program Files\STNEXP\Queries\10-597,753 plus link-Hy O on indene.str



chain nodes : 10 11 12 13 15 16 19 ring nodes : 1 2 3 4 5 6 7 8 9 chain bonds : 8-10 10-11 10-12 12-13 13-15 15-16 ring bonds : 1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-9 7-8 8-9 exact/norm bonds : 5-7 6-9 7-8 8-9 10-11 10-12 15-16 exact bonds : 8-10 12-13 13-15 normalized bonds : 1-2 1-6 2-3 3-4 4-5 5-6 isolated ring systems : containing 1 :

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:CLASS 11:CLASS 12:CLASS 13:Atom 15:CLASS 16:Atom 19:CLASS 20:Atom

L8 STRUCTURE UPLOADED

=> d 18 L8 HAS NO ANSWERS L8 STR *** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

Structure attributes must be viewed using STN Express query preparation.

0 ANSWERS

=> s 18 sss sam SAMPLE SEARCH INITIATED 15:56:47 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 20695 TO ITERATE

9.7% PROCESSED 2000 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED) SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 405285 TO 422515

L9 0 SEA SSS SAM L8

=> s 18 sss full

FULL SEARCH INITIATED 15:56:53 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 412240 TO ITERATE

100.0% PROCESSED 412240 ITERATIONS 60 ANSWERS

SEARCH TIME: 00.00.15

L10 60 SEA SSS FUL L8

=> FIL CAPLUS

COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST 186.84 617.14

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE TOTAL

ENTRY SESSION

CA SUBSCRIBER PRICE

0.00 -32.80

FILE 'CAPLUS' ENTERED AT 15:57:41 ON 13 OCT 2009
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 13 Oct 2009 VOL 151 ISS 16

FILE LAST UPDATED: 12 Oct 2009 (20091012/ED)

REVISED CLASS FIELDS (/NCL) LAST RELOADED: Aug 2009

USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Aug 2009

CAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2009.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 110 L11 7 L10

=> d ibib abs hitstr 1-YOU HAVE REQUESTED DATA FROM 7 ANSWERS - CONTINUE? Y/(N):y

L11 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2008:1045236 CAPLUS <<LOGINID::20091013>>

DOCUMENT NUMBER: 149:307680

TITLE: Preparation of N-piperidinylethylcyclohexyl

indolecarboxamide derivatives as inhibitors of

chemokine receptors or macrophage protein

INVENTOR(S): Hersperger, Rene; Janser, Philipp; Miltz, Wolfgang

PATENT ASSIGNEE(S): Novartis AG, Switz.
SOURCE: PCT Int. Appl., 70pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

P	PATENT NO.						D	DATE		APPLICATION NO.							DATE		
M.	WO 2008101905					A1		2008	0828		WO 2	008-	EP51	951		2	0080	218	
	W:	AI	Ξ, Α	G,	AL,	AM,	AO,	ΑT,	ΑU,	ΑZ,	BA,	BB,	ВG,	BH,	BR,	BW,	BY,	ΒZ,	
		CZ	A, C	Ή,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,	
		F	I, G	Β,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	
		K	3, K	Μ,	KN,	KΡ,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	
		MI	Ξ, Μ	ΙG,	MK,	MN,	MW,	MX,	MY,	ΜZ,	ΝA,	NG,	ΝI,	NO,	NZ,	OM,	PG,	PH,	
		P1	, P	Ϋ,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ТJ,	TM,	
		Tì	1, T	'n,	TT,	TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	ZA,	ZM,	ZW				
	RW	: A	Г, В	ΒE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HR,	HU,	
		I	Ξ, Ι	S,	ΙT,	LT,	LU,	LV,	MC,	MT,	NL,	NO,	PL,	PT,	RO,	SE,	SI,	SK,	
		TH	₹, В	F,	ΒJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	
		T	G, B	SW,	GH,	GM,	ΚE,	LS,	MW,	ΜZ,	NΑ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	
		$\mathbf{A}\mathbf{I}$	1, A	Z,	BY,	KG,	KΖ,	MD,	RU,	ΤJ,	TM								
A	U 200	8219	9317	,		A1		2008	0828		AU 2	008-	2193	17		2	0080	218	
K:	KR 2009103943					Α		2009	1001		KR 2	009-	7170	79		20080218			
PRIORI'	PRIORITY APPLN. INFO.:										EP 2	007-	1026	22		A 2	0070	219	
											WO 2	008-	EP51	951	1	₩ 2	00802	218	
OBITED	COTTOC	T / 0				3 C 3 D 1		1 10	2076	2 0									

OTHER SOURCE(S): MARPAT 149:307680

GI

- AB Title compds. represented by the formula I [wherein X = CH2 or NH; n = 1 or 2; R = (un)substituted (hetero)alkyl or (hetero)aryl; and pharmaceutically acceptable salts, esters or prodrugs thereof] were prepared as inhibitors of chemokine receptors or macrophage protein. The process of preparation of the invention compds. was described, 29 final compound were obtained, such as II. I had IC50 values between 0.0002 and 10 μ M in CCR2/CCR5 membrane and functional assay. Thus, I and their pharmaceutical compns. are useful for the treatment of an autoimmune or inflammatory disease or condition.
- IT 1050425-64-3P

RL: PAC (Pharmacological activity); PRPH (Prophetic); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of N-[(piperidinyl)ethylcyclohexyl] indole-2-carboxamide derivs. as inhibitors of chemokine receptors or macrophage protein) 1050425-64-3 CAPLUS

RN 1050425-64-3 CAPLUS
CN 1H-Indole-2-carboxamide, 4-(cyclobutylmethoxy)-N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]-,
hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.

RN

HC1

```
ΤТ
     1050424-98-0P
                     1050425-00-7P
                                      1050425-01-8P
                     1050425-05-2P
     1050425-03-0P
                                      1050425-08-5P
     1050425-12-1P
                     1050425-15-4P
                                      1050425-18-7P
     1050425-21-2P
                     1050425-23-4P
                                      1050425-24-5P
     1050425-26-7P
                     1050425-29-0P
                                      1050425-31-4P
     1050425-34-7P
                     1050425-36-9P
                                      1050425-37-0P
     1050425-40-5P
                     1050425-43-8P
                                      1050425-45-0P
     1050425-48-3P
                     1050425-51-8P
                                      1050425-53-0P
     1050425-54-1P
                     1050425-55-2P
                                      1050425-56-3P
     1050425-59-6P
                     1050425-61-0P
```

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of N-[(piperidinyl)ethylcyclohexyl] indole-2-carboxamide derivs. as inhibitors of chemokine receptors or macrophage protein) 1050424-98-0 CAPLUS

CN 1H-Indole-2-carboxamide, 4-(cyclobutylmethoxy)-N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 1050425-00-7 CAPLUS

CN 1H-Indole-2-carboxamide, N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]-4-[(tetrahydro-3-furanyl)methoxy]- (CA INDEX NAME)

Absolute stereochemistry.

RN 1050425-01-8 CAPLUS

CN 1H-Indole-2-carboxamide, 4-(3-furanylmethoxy)-N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]- (CA INDEX NAME)

RN 1050425-03-0 CAPLUS

CN 1H-Indole-2-carboxamide, 4-[(2-chloro-4-thiazolyl)methoxy]-N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]-(CA INDEX NAME)

Absolute stereochemistry.

RN 1050425-05-2 CAPLUS

CN 1H-Indole-2-carboxamide, N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]-4-[(6-methoxy-3-pyridinyl)methoxy]- (CA INDEX NAME)

RN 1050425-08-5 CAPLUS

CN 1H-Indole-2-carboxamide, N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]-4-[(4,5,6,7-tetrahydro-4-oxo-3-benzofuranyl)methoxy]- (CA INDEX NAME)

Absolute stereochemistry.

RN 1050425-12-1 CAPLUS

CN 1H-Indole-2-carboxamide, N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]-4-[(4,5,6,7-tetrahydro-6,6-dimethyl-4-oxo-3-benzofuranyl)methoxy]- (CA INDEX NAME)

RN 1050425-15-4 CAPLUS

CN 1H-Indole-2-carboxamide, 4-[[(3S)-2,3-dihydro-3-benzofurany1]methoxy]-N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methy1-1-piperidiny1]ethy1]cyclohexy1]- (CA INDEX NAME)

Absolute stereochemistry.

RN 1050425-18-7 CAPLUS

CN 1H-Indole-2-carboxamide, 4-[(2,3-dihydro-6-methoxy-3-benzofuranyl)methoxy]-N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]- (CA INDEX NAME)

RN 1050425-21-2 CAPLUS

CN 1H-Indole-2-carboxamide, N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]-4-[(4-methoxy-3-benzofuranyl)methoxy]-(CA INDEX NAME)

Absolute stereochemistry.

RN 1050425-23-4 CAPLUS

CN 1H-Indole-2-carboxamide, 4-[(4,6-difluoro-3-benzofuranyl)methoxy]-N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl](CA INDEX NAME)

RN 1050425-24-5 CAPLUS

CN 1H-Indole-2-carboxamide, 4-[(5-chloro-3-benzofuranyl)methoxy]-N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]-(CA INDEX NAME)

Absolute stereochemistry.

RN 1050425-26-7 CAPLUS

CN 1H-Indole-2-carboxamide, N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]-4-[(6-methoxy-3-benzofuranyl)methoxy]-(CA INDEX NAME)

RN 1050425-29-0 CAPLUS

CN 1H-Indole-2-carboxamide, 4-[(6-ethoxy-3-benzofuranyl)methoxy]-N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]-(CA INDEX NAME)

Absolute stereochemistry.

RN 1050425-31-4 CAPLUS

CN 1H-Indole-2-carboxamide, 4-[[6-(cyclopropylmethoxy)-3-benzofuranyl]methoxy]-N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]- (CA INDEX NAME)

PAGE 1-B

RN 1050425-34-7 CAPLUS

CN 1H-Indole-2-carboxamide, 4-[[6-(2-ethoxyethoxy)-3-benzofuranyl]methoxy]-N[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1piperidinyl]ethyl]cyclohexyl]- (CA INDEX NAME)

PAGE 1-B

OEt

RN 1050425-36-9 CAPLUS

CN 1H-Indole-2-carboxamide, N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]-4-[[6-(2-methoxy-1-methylethoxy)-3-benzofuranyl]methoxy]- (CA INDEX NAME)

OMe

RN 1050425-37-0 CAPLUS

CN 1H-Indole-2-carboxamide, N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]-4-[[6-[2-(1-methylethoxy)ethoxy]-3-benzofuranyl]methoxy]- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

OPr-i

RN 1050425-40-5 CAPLUS

CN 1H-Indole-2-carboxamide, N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]-4-[[6-(3-methoxypropoxy)-3-benzofuranyl]methoxy]- (CA INDEX NAME)

RN 1050425-43-8 CAPLUS
CN 1H-Indole-2-carboxamide, 4-[[6-(3-ethoxypropoxy)-3-benzofuranyl]methoxy]-N[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1piperidinyl]ethyl]cyclohexyl]- (CA INDEX NAME)

$$-(CH2)3OEt$$

RN 1050425-45-0 CAPLUS

CN 1H-Indole-2-carboxamide, N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]-4-[[6-[[(3S)-tetrahydro-3-furanyl]oxy]-3-benzofuranyl]methoxy]- (CA INDEX NAME)

Absolute stereochemistry.

RN 1050425-48-3 CAPLUS

CN 1H-Indole-2-carboxamide, 4-[(6-fluoro-3-benzofuranyl)methoxy]-N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]-(CA INDEX NAME)

RN 1050425-51-8 CAPLUS

CN 1H-Indole-2-carboxamide, N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]-4-[(7-methoxy-3-benzofuranyl)methoxy]-(CA INDEX NAME)

Absolute stereochemistry.

RN 1050425-53-0 CAPLUS

CN 1H-Indole-2-carboxamide, N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]-4-[2-(2-methoxyphenyl)ethoxy]- (CA INDEX NAME)

RN 1050425-54-1 CAPLUS

CN 1H-Indole-2-carboxamide, N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]-4-[2-(3-methoxyphenyl)ethoxy]- (CA INDEX NAME)

Absolute stereochemistry.

RN 1050425-55-2 CAPLUS

CN 1H-Indole-2-carboxamide, N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]-4-[2-(4-methoxyphenyl)ethoxy]- (CA INDEX NAME)

RN 1050425-56-3 CAPLUS

CN 1H-Indole-2-carboxamide, N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]-4-[2-(2-methoxy-3-pyridinyl)ethoxy]- (CA INDEX NAME)

Absolute stereochemistry.

RN 1050425-59-6 CAPLUS

CN 1H-Indole-2-carboxamide, N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]-4-[2-(6-methoxy-3-pyridinyl)ethoxy]- (CA INDEX NAME)

1050425-61-0 CAPLUS RN

1H-Indole-2-carboxamide, N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]-4-[2-(6-methoxy-3-benzofuranyl)ethoxy]-(CA INDEX NAME) CN

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD

(1 CITINGS)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:1271554 CAPLUS <<LOGINID::20091013>>

DOCUMENT NUMBER: 147:522099

TITLE: Aminomethylcyclohexyl carboxamide compounds that are

agonists of muscarinic receptors and that may be

effective in treating pain, Alzheimer's disease and/or

schizophrenia and their preparation

INVENTOR(S): Cheng, Yun-Xing; Luo, Xuehong; Tomaszewski, Miroslaw

PATENT ASSIGNEE(S): Astrazeneca AB, Swed. SOURCE: PCT Int. Appl., 237 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.)	DATE			APE	PL]	ICAT	ION I	NO.		DATE			
WO	2007	2007126362					2007	1108		WO	20	007-	SE409	9		2	0070	427	
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	ΒA,	BE	3,	BG,	BH,	BR,	BW,	BY,	BZ,	CA,	
		CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	Ν	1,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	
		GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	II	Ο,	IL,	IN,	IS,	JP,	ΚE,	KG,	KM,	
		KN,	KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS	3,	LT,	LU,	LY,	MA,	MD,	MG,	MK,	
		MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NC),	NΖ,	OM,	PG,	PH,	PL,	PT,	RO,	
		RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SN	1,	SV,	SY,	ΤJ,	TM,	TN,	TR,	TT,	
		TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	ZA,	ZN	1,	ZW							
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EF	Ξ,	ES,	FΙ,	FR,	GB,	GR,	HU,	IE,	
		IS,	IT,	LT,	LU,	LV,	MC,	MT,	NL,	PΙ	٠,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	
		ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	G₹	V,	ML,	MR,	NE,	SN,	TD,	TG,	BW,	
		GH,	GM,	KΕ,	LS,	MW,	MΖ,	NA,	SD,	SI	٠,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	
		•	•		•		ТJ,												
ΑU	2007	2440					2007												
	2650				A1		2007										0070	427	
EP	2024						2009										0070		
	R:				•		CZ,				•			•	•	•	•	•	
		,	•	,	•	,	LV,	MC,	MΤ,	NI	٠,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	
		,	,	,	MK,														
	2009						2009						5094				0070		
	2007						2007							88		_	0070		
	2008						2009							50			0081	-	
	2008						2008							3			0081		
	2008				A		2009										0081		
	2009				A		2009							90			0081		
	1014				A		2009	0715						5295			0090		
IORITY APPLN. INFO.:																	0060		
										WO	2(107-	SE409	9		w 2	0070	427	

OTHER SOURCE(S): MARPAT 147:522099

GΙ

AΒ Compds. of formula I, or pharmaceutically acceptable salts thereof, as well as salts and pharmaceutical compns. including the compds. are prepared They are useful in therapy, in particular in the management of pain. Compds. of formula I wherein R1 is (un)substituted C6-10 aryl, (un) substituted C2-9 heteroaryl, (un) substituted C3-5 heterocycloalkyl, (un) substituted C1-6 alkyl, etc.; R2 and R3 are independently (un) substituted C1-6 alkyl, (un) substituted C2-6 alkenyl, and (un) substituted C1-6 alkoxy; R2R3 taken together with N to form (un) substituted heterocycloalkyl; X is CO, CONH, CO2, and SO2; and their pharmaceutically acceptable salts, diastereomers, enantiomers and mixts. thereof, are claimed. Example compound II TFA was prepared by reductive amination fo 2-(piperidin-1-ylmethyl)cyclohexanone; the resulting [2-(piperidin-1-ylmethyl)cyclohexyl]amine underwent acylation with benzyl chloroformate to give trans-[2-(piperidin-1-ylmethyl)cyclohexyl]carbamate, which underwent hydrogenation to give trans-[2-(piperidin-1-ylmethyl)cyclohexyl]amine, which underwent benzoylation with 4-fluorobenzoyl chloride to give II-TFA. All the invention compds. were evaluated for their muscarinic receptor agonistic activity (some data given).

IT 956321-13-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of aminomethylcyclohexyl carboxamide derivs. muscarinic receptor agonists useful in treatment of pain, Alzheimer's disease and schizophrenia)

RN 956321-13-4 CAPLUS

CN 1H-Indole-2-carboxamide, 5-methoxy-N-[(1R,2S)-2-(1-piperidinylmethyl)cyclohexyl]-, rel- (CA INDEX NAME)

Relative stereochemistry.

L11 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007;944130 CAPLUS <<LOGINID::20091013>>

DOCUMENT NUMBER: 147:300997

TITLE: Benzoyl-piperidine derivatives as 5HT2/D3 modulators

and their preparation, pharmaceutical compositions and

use in the treatment of CNS disorders

INVENTOR(S): Gobbi, Luca; Jaeschke, Georg; Luebbers, Thomas; Roche,

Olivier; Rodriguez Sarmiento, Rosa Maria; Steward,

Lucinda

PATENT ASSIGNEE(S): F. Hoffmann-La Roche AG, Switz.

SOURCE: PCT Int. Appl., 164pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA:	TENT	NO.			KIN	D	DATE		APPLICATION NO.						DATE			
WO	2007	0935	40		A1	_	2007	0823			2007-				2	0070	207	
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BE	3, BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
											z, EC,							
				-			-				IN,		-					
		KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	L	[, LU,	LV,	LY,	MA,	MD,	MG,	MK,	
		•	•	•	•		•	•			, NZ,		•	•	•	•	•	
		RS,	RU,	sc,	SD,	SE,	SG,	SK,	SL,	SI	1. SV.	SY,	ΤJ,	TM,	TN,	TR,	TT,	
		TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	ZA,	$z_{\rm N}$	1, ZW	·	•	•	•	·	•	
	RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EF	E, ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,	
											r, RO,							
		CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	MI	, MR,	NE,	SN,	TD,	TG,	BW,	GH,	
		GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ	z, TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,	
		KG,	KZ,	MD,	RU,	TJ,	TM											
AU	2007	2165	63		A1		2007	0823		ΑU	2007-	-2165	63		2	0070	207	
CA	2640	807			A1		2007	0823		CA	2007-	-2640	807		2	0070	207	
EΡ	1987	019			A1		2008	1105		EP	2007-	7044	16		2	0070	207	
	R:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	E	E, ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,	
		IS,	IT,	LI,	LT,	LU,	LV,	MC,	NL,	$_{\mathrm{PI}}$	L, PT,	RO,	SE,	SI,	SK,	TR		
JΡ	2009	5268	07		T		2009	0723		JΡ	2008-	-5547	38		2	0070	207	
US	2007	0197	531		A1		2007	0823		US	2007-	-7056	35		2	0070	213	
	2008										2008-					0800	812	
IN	2008	CN04	269		A		2009	0313		IN	2008-	-CN42	69		2	0080	812	
CN	1013	8458	1		A		2009	0311		CN	2007-	-8000	5790		2	0080	818	
NO	2008	0035	84		A		2008	1114			2008-					0800	819	
KR	2008	0958	99		A		2008	1029		KR	2008-	-7223	77		2	0080	912	
ORIT	Y APP	LN.	INFO	.:						EP	2006-	-1101	12		A 2	0060	217	
										\mathbf{E} P	2006-	-1124	64		A 2	0060	411	
										WO	2007-	-EP51	160		W 2	0070	207	
ED CO	TIDOE	/C) .			MADI	ייי עם	1/7.	2000	0.7									

OTHER SOURCE(S): MARPAT 147:300997

GΙ

$$(CH_2)_n - Z - (CH_2)_m - NH$$

O

R

R

A

The invention relates to compds. of the general formula I as dual modulators of the 5-HT2a and D3 receptors useful against CNS disorders. Compds. of formula I wherein A is (un)substituted aryl and (un)substituted 5- to 6-membered heteroaryl; n is 1, 2, 3, and 4; r is 0, 1, 2, and 3; Z is cyclopropane, cyclobutane, cyclopentane, and cyclohexane; R1 is C2-6 (aryl)alkenyl, C2-6 (aryl)alkynyl, (un)substituted C1-6 alkyl, C1-6 alkoxy, (un)substituted C3-10 cycloalkyl, etc.; R2 is H, OH, C1-6 alkyl, and halo; and their pharmaceutically acceptable salts thereof are claimed. Example compound II was prepared by a multistep procedure (procedure given). All the invention compds. were evaluated for their 5HT2a and D3 modulatory activity (some data given). Examples of formulation is also given.

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of benzoyl-piperidine derivs. as 5HT2/D3 modulators useful in the treatment of CNS disorders)

RN 946596-46-9 CAPLUS

CN 1H-Indole-2-carboxamide, N-[trans-4-[2-[4-(4-fluorobenzoy1)-1-piperidiny1]ethy1]cyclohexy1]-5-(trifluoromethoxy)- (CA INDEX NAME)

Relative stereochemistry.

$$F_3C$$

PAGE 1-B

RN 946596-47-0 CAPLUS

CN 1H-Indole-2-carboxamide, N-[trans-4-[2-[4-(4-fluorobenzoyl)-1-piperidinyl]ethyl]cyclohexyl]-5-methoxy- (CA INDEX NAME)

Relative stereochemistry.

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD

(1 CITINGS)

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:343073 CAPLUS <<LOGINID::20091013>>

DOCUMENT NUMBER: 144:390734

TITLE: Preparation of 2-arylcarboxamide-nitrogenous

heterocycle compounds as melanin concentrating hormone

receptor antagonists

INVENTOR(S): Suzuki, Takao; Moriya, Minoru; Sakuraba, Shunji;

Mizutani, Sayaka; Iwaasa, Hisashi; Kanatani, Akio

PATENT ASSIGNEE(S): Banyu Pharmaceutical Co., Ltd, Japan

SOURCE: PCT Int. Appl., 87 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	TENT	NO.			KIND DAT					APPLICATION NO.							DATE			
WO	2006	 0386	80		A1	_	2006	0413		WO	200	 5-J	JP18.	581		-	2005	0930		
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BE	в, в	G,	BR,	BW,	BY,	BZ	, CA	CH,		
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ	Z, E	C,	EE,	EG,	ES,	FΙ	, GB	, GD,		
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS	3, J	Ρ,	ΚE,	KG,	ΚM,	ΚP	, KR	, KΖ,		
		LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MZ	A, M	D,	MG,	MK,	MN,	$M\overline{W}$, MX	, MZ,		
		NA,	NG,	ΝI,	NO,	NZ,	OM,	PG,	PH,	PΙ	, P	Τ,	RO,	RU,	SC,	SD	, SE	, SG,		
		SK,	SL,	SM,	SY,	ТJ,	TM,	TN,	TR,	TI	Г, Т	Z,	UA,	UG,	US,	UZ	, VC	, VN,		
		YU,	ZA,	ZM,	ZW															
	RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE	Ξ, Ε	S,	FI,	FR,	GB,	GR	, HU	, IE,		
		IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	P]	Γ, R	Ο,	SE,	SI,	SK,	TR	, BF	, ВJ,		
		CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	MI	., M	R,	ΝE,	SN,	TD,	ΤG	, BW	, GH,		
		GM,	KE,	LS,	MW,	MZ,	NΑ,	SD,	SL,	SZ	Z, T	Z,	UG,	ZM,	ZW,	AM	, AZ	, BY,		
			KZ,																	
AU	2005	2904	36		A1		2006	0413		ΑU	200	5-2	2904	36			2005	0930		
CA	2582	327			A1		2006	0413		CA	200	5-2	2582	327			2005	0930		
EP	1798	221			A1		2007	0620		ΕP	200	5-7	7903	83			2005	0930		
																		, IE,		
		IS,	IT,	LI,	LT,	LU,	LV,	MC,	NL,	ΡI	, P	Τ,	RO,	SE,	SI,	SK	, TR			
CN	1010	6535	6		A		2007	1031		CN	200	5-8	3004	0879			2005	0930		
US	2007	0299	070		A1		2007	1227		US	200	7-6	630	38			2007	315		
	7531	668			В2		2009	0512												
IN	2007	DN02	546		A		2007	0803		IN	200	7 - E	N25	46			2007	0404		
PRIORIT	IORITY APPLN. INFO.:									JP	200	4-2	898	25		A	2004	1001		
										WO	200	5-J	JP18.	581		W	2005	0930		
OTHER S	OURCE	(S):			MAR	PAT	144:	3907	34											

OTHER SOURCE(S): MARPAT 144:390734

GI

AB Title compds. I [R1, R2 = optionally substituted alkyl with R5, optionally substituted cycloalkyl with R6, optionally substituted heterocycloalkyl with R6; further details on R1 and R2 are given.; R3a, R3b = H, optionally substituted alkyl with R5; R4 = H, halo, optionally substituted alkyl with R5, etc.; R5 = H, halo, cyano, etc.; R6 = R5, oxo; X = -N-, -C(R3c)-; R3c = same as R3a; Y1 = single bond, optionally substituted alkylene with alkyl, optionally substituted oxyalkylene with alkyl, etc.; Y2 = optionally substituted alkylene with alkyl, optionally substituted oxyalkylene with alkyl; Ar1 = optionally substituted divalent monocyclic aromatic carbocycle with R5, optionally substituted divalent monocyclic aromatic

heterocycle with R5; Ar2 = optionally substituted aromatic carbocycle with R5, optionally substituted aromatic heterocycle with R5] were prepared For example, HATU mediated amidation of 5-benzyloxyindole-2-carboxylic acid with 4-(morpholinomethyl)aniline·2HCl, e.g., prepared from morpholine in 2 steps, afforded compound II. In MCH (melanin concentrating hormone) binding

inhibition assays, the IC50 value of compound II hydrochloride was 9.6 nM. Compds. I are claimed useful for the treatment of diabetes, obesity, etc. 882873-21-4P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(drug candidate; preparation of 2-arylcarboxamide-nitrogenous heterocycle compds. as melanin concentrating hormone receptor antagonists for treatment

of diabetes, obesity, etc.)

RN 882873-21-4 CAPLUS

ΙT

of

CN 1H-Indole-2-carboxamide, N-[4-(4-morpholinylmethyl)phenyl]-5-(phenylmethoxy)- (CA INDEX NAME)

$$\begin{array}{c|c} H & O \\ \hline N & C - NH \end{array}$$

IT 882873-20-3P 882873-34-9P 882873-46-3P 882873-47-4P 882873-54-3P 882873-55-4P 882873-56-5P 882873-57-6P 882873-63-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of 2-arylcarboxamide-nitrogenous heterocycle compds. as melanin concentrating hormone receptor antagonists for treatment

diabetes, obesity, etc.)

RN 882873-20-3 CAPLUS

CN 1H-Indole-2-carboxamide, N-[4-(4-morpholinylmethyl)phenyl]-5-(phenylmethoxy)-, hydrochloride (1:1) (CA INDEX NAME)

$$\begin{array}{c|c} H & O \\ N & C - NH \end{array}$$

● HC1

RN 882873-34-9 CAPLUS

CN 1H-Indole-2-carboxamide, N-[3-methoxy-4-(4-morpholinylmethyl)phenyl]-5- (phenylmethoxy)- (CA INDEX NAME)

RN 882873-46-3 CAPLUS

CN 1H-Indole-2-carboxamide, N-[4-[(4-methoxy-1-piperidinyl)methyl]phenyl]-5-(phenylmethoxy)- (CA INDEX NAME)

$$\begin{array}{c|c} H & O \\ \hline N & C-NH \end{array}$$
 OMe

RN 882873-47-4 CAPLUS

CN 1H-Indole-2-carboxamide, N-[4-[(4-methoxy-1-piperidinyl)methyl]phenyl]-5-(phenylmethoxy)-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 882873-46-3 CMF C29 H31 N3 O3

$$\begin{array}{c|c} H & O \\ \hline N & C-NH \end{array}$$
 OMe

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 882873-54-3 CAPLUS

CN 1H-Indole-2-carboxamide, 5-(phenylmethoxy)-N-[4-(1-piperidinylmethyl)phenyl]- (CA INDEX NAME)

$$\begin{array}{c|c} H & O \\ \hline N & C-NH \end{array}$$

RN 882873-55-4 CAPLUS

CN 1H-Indole-2-carboxamide, 5-(phenylmethoxy)-N-[4-(1-piperidinylmethyl)phenyl]-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 882873-54-3 CMF C28 H29 N3 O2

$$\begin{array}{c|c} H & O \\ \hline N & C - NH \end{array}$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 882873-56-5 CAPLUS

CN 1H-Indole-2-carboxamide, 5-(phenylmethoxy)-N-[4-(1-pyrrolidinylmethyl)phenyl]- (CA INDEX NAME)

$$\begin{array}{c|c} H & O \\ \hline N & C - NH \end{array}$$

RN 882873-57-6 CAPLUS

CN 1H-Indole-2-carboxamide, 5-(phenylmethoxy)-N-[4-(1-pyrrolidinylmethyl)phenyl]-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 882873-56-5 CMF C27 H27 N3 O2

$$\begin{array}{c|c} H & O \\ \hline H & C \\ \hline \end{array}$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 882873-63-4 CAPLUS

CN 1H-Indole-2-carboxamide, N-[4-[1-(4-morpholinyl)ethyl]phenyl]-5- (phenylmethoxy)- (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 10 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2009 ACS on STN

2005:902881 CAPLUS <<LOGINID::20091013>> ACCESSION NUMBER:

DOCUMENT NUMBER: 143:248292

TITLE: Preparation of 1H-indole-2-carboxylic acid

N-(piperidin-4-yl)amides and related derivatives as

chemokine receptor, particularly CCR2 and CCR5

antagonists

INVENTOR(S): Hersperger, Rene; Janser, Philipp; Pfenninger, Emil;

Wuethrich, Hans Juerg; Miltz, Wolfgang

PATENT ASSIGNEE(S): Novartis A.-G., Switz.; Novartis Pharma G.m.b.H.

PCT Int. Appl., 240 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	PATENT NO.									APPL	ICAT	ION 1		D.				
	20050 20050	779	32		A2		2005	0825	,	wo 2	005-	EP13	62		2	0050	210	
WO	W: RW:	AE, CN, GE, LK, NO, TJ, BW, AZ, EE,	AG, CO, GH, LR, NZ, TM, GH, BY,	AL, CR, GM, LS, OM, TN, GM, KG,	AM, CU, HR, LT, PG, TR, KE, KZ,	AT, CZ, HU, LU, PH, TT, LS, MD, GB,	AU, DE, ID, LV, PL, TZ, MW, RU, GR, BF,	AZ, DK, IL, MA, PT, UA, MZ, TJ,	BA, DM, IN, MD, RO, UG, NA, TM, IE,	DZ, IS, MG, RU, US, SD, AT, IS,	EC, JP, MK, SC, UZ, SL, BE, IT,	EE, KE, MN, SD, VC, SZ, BG, LT,	EG, KG, MW, SE, VN, TZ, CH, LU,	ES, KP, MX, SG, YU, UG, CY, MC,	FI, KR, MZ, SK, ZA, ZM, CZ, NL,	GB, KZ, NA, SL, ZM, ZW, DE, PL,	GD, LC, NI, SY, ZW, AM, DK, PT,	SM
AU CA	20052 20052 25546 17208	2125: 2125: 342 359	10 10	·	B2 A1 A2		2008 2005	1030 0825 1115	!	CA 2 EP 2	005- 005-	2554 7073	642 21		2	0050 0050	210 210	
BR JP	19467 20050 20075	HR, 713 0076: 5221	LV, 17	MK,	YU A A T		MC, 2007 2007 2007	0411 0703		CN 2 BR 2 JP 2	005- 005- 006-	8001. 7617 5525	2297 49		2 2 2	0050 0050	210 210	
Z A IN MX KR	20060 20060 20060 20070 88323	0061 CN029 0091 0275	80 936 60 11		A A A		2008 2007 2006 2007 2009	0528 0608 1002 0309	1	ZA 2 IN 2 MX 2	006- 006- 006-	6180 CN29 9160 7183	36		2 2 2	0060 0060 0060	726 810 811	
NO	20060 20070 Y A PPI	040 0155 LN.	77 7 21		A A1		2006 2007 T 14	1110 0705		US 2 GB 2 WO 2	006- 004- 005-	5977 3038 EP13	53 62	j	2 A 2	0060 0040	920 211	

OTHER SOURCE(S): CASREACT 143:248292; MARPAT 143:248292

GΙ

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Title compds. I [wherein Z = CH2 and derivs., NH and derivs., O, S; R, R1 AB = independently OH and derivs., (un)substituted hetero/aryl, arylalkyl, etc.; X = (un)substituted hetero/cycloalkyl, hetero/aryl; Q = linker of between 1 and 3 atoms length; Y = (un)substituted hetero/cycloalkyl, bridged hetero/cycloalkyl, hetero/aryl, fused aryl-heterocycloalkyl; and their pharmaceutically acceptable salts, esters and prodrugs] were prepared as CCR2 and CCR5 antagonists. For example, reacting [1-[2-(azepan-1-yl)ethyl]piperidin-4-yl]amine•3HCl (preparation given) and 4-(5-chlorobenzofuran-3-ylmethoxy)-1H-indole-2-carboxylic acid (preparation given) gave amide II in 57% yield. I had IC50 between 0.0003 and 10 μM and between 0.004 and 10 μM in CCR2 and CCR5 membrane binding assays. I are effective as dual CCR2 and CCR5 antagonists. I are useful for treating autoimmune and inflammatory diseases, HIV infection and AIDS. 863250-06-0P, 4-Isobutoxy-1H-indole-2-carboxylic acid ΙT N-[4-[2-(azepan-1-y1)ethy1]pheny1]amide 863252-49-7P, 4-(5-Chlorobenzofuran-3-ylmethoxy)-1H-indole-2-carboxylic acid N-[4-[2-(piperidin-1-y1)ethy1]pheny1]amide 863252-51-1P, 4-(5-Chlorobenzofuran-3-ylmethoxy)-1H-indole-2-carboxylic acid N-[4-[2-(4-hydroxypiperidin-1-yl)ethyl]phenyl]amide RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of chemokine receptor antagonists, particularly 1H-indole-2-carboxylic acid N-(piperidin-4-yl) amides)

RN 863250-06-0 CAPLUS

CN 1H-Indole-2-carboxamide, N-[4-[2-(hexahydro-1H-azepin-1-y1)ethyl]phenyl]-4-(2-methylpropoxy)- (CA INDEX NAME)

RN 863252-49-7 CAPLUS

CN 1H-Indole-2-carboxamide, 4-[(5-chloro-3-benzofuranyl)methoxy]-N-[4-[2-(1-piperidinyl)ethyl]phenyl]- (CA INDEX NAME)

RN 863252-51-1 CAPLUS

CN 1H-Indole-2-carboxamide, 4-[(5-chloro-3-benzofuranyl)methoxy]-N-[4-[2-(4-hydroxy-1-piperidinyl)ethyl]phenyl]- (CA INDEX NAME)

$$\begin{array}{c} \text{CH}_2 \\ \text{O} \\ \text{O} \\ \text{O} \\ \text{C-NH} \end{array} \begin{array}{c} \text{CH}_2\text{-CH}_2\text{-N} \\ \text{OH} \\ \end{array}$$

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD

(4 CITINGS)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:780360 CAPLUS <<LOGINID::20091013>>

DOCUMENT NUMBER: 141:295859

TITLE: Preparation of N-aryl-1H-indole-2-carboxamides as

cytokine inhibitors

INVENTOR(S): Cirillo, Pier Francesco; Gao, Donghong Amy; Goldberg,

Daniel R.; Hammach, Abdelhakim; Hao, Ming-Hong; Kamhi, Victor Marc; Moss, Neil; Netherton, Matthew Russell; Qian, Kevin Chungeng; Ralph, Mark Stephen; Wu, Lifen;

Xiong, Zhaoming

PATENT ASSIGNEE(S): Boehringer Ingelheim Pharmaceuticals, Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 82 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND D	DATE APP	PLICATION NO.	DATE			
US 20040186114			2004-789354	20040227			
US 7 078419	B2 20	20060718					
AU 2004264409	A1 20	20050224 AU	2004-264409	20040302			
CA 2518774	A1 20	20050224 CA	2004-2518774	20040302			
WO 2005016918	A2 20	20050224 WO	2004-US6264	20040302			
WO 2005016918	A3 20	20050407					
W: AE, AG, AL,	AM, AT, A	AU, AZ, BA, BB	B, BG, BR, BW, BY,	BZ, CA, CH,			
CN, CO, CR	CU, CZ, I	DE, DK, DM, DZ	E, EC, EE, EG, ES,	FI, GB, GD,			
GE, GH, GM	HR, HU,	ID, IL, IN, IS	JP, KE, KG, KP,	KR, KZ, LC,			
LK, LR, LS,	LT, LU,	LV, MA, MD, MG	G, MK, MN, MW, MX,	MZ, NA, NI,			
NO, NZ, OM,	PG, PH, 1	PL, PT, RO, RU	J, SC, SD, SE, SG,	SK, SL, SY,			
TJ, TM, TN,	TR, TT, 3	TZ, UA, UG, US	S, UZ, VC, VN, YU,	ZA, ZM, ZW			
RW: BW, GH, GM,	KE, LS, I	MW, MZ, SD, SL	, SZ, TZ, UG, ZM,	ZW, AM, AZ,			
BY, KG, KZ	MD, RU,	TJ, TM, AT, BE	E, BG, CH, CY, CZ,	DE, DK, EE,			
ES, FI, FR	GB, GR, I	HU, IE, IT, LU	J, MC, NL, PL, PT,	RO, SE, SI,			

SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG BR 2004008228 20060221 BR 2004-8228 20040302 Α EP 1631567 20060308 EP 2004-775820 20040302 A2 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, TR, BG, CZ, EE, HU, PL, SK CN 1759114 Α 20060412 CN 2004-80006351 20040302 Τ JP 2006519861 20060831 JP 2006-508971 20040302 CN 101239972 Α 20080813 CN 2008-10083505 20040302 NZ 542775 20080829 NZ 2004-542775 20040302 Α ZA 2005006242 20060726 ZA 2005-6242 Α 20050804 IN 2005DN03676 20070824 IN 2005-DN3676 Α 20050819 US 20060235017 **A**1 20061019 US 2006-426603 20060627 US 7335657 В2 20080226 PRIORITY APPLN. INFO.: US 2003-453364P Ρ 20030310 A1 20040227 US 2004-789354 CN 2004-80006351 A3 20040302 W 20040302 WO 2004-US6264

OTHER SOURCE(S): MARPAT 141:295859

Title compds. I [wherein Ar = (un)substituted aryl; Q = N, (un)substituted CH; W = N, CH; X = CH2, O, S, (un)substituted NH; Y = O, SOO-2, (un)substituted CH2, CH=CH, NH; R3-R5 = independently H, halo, alkyl; R6 = a bond, O, O(CH2)1-5, CO, NH, CONH, S, (un)substituted alkyl, alkenyl, acyl, heterocyclyl, aryl; R7 = H, alkyl; and pharmaceutically acceptable salts, acids, or isomers thereof] were prepared For example, a 9-step synthesis starting from 3-methyl-2-nitrophenol, di-Et oxalate, 5-tert-butyl-3-methanesulfonamido-2-methoxyaniline, 2,4-dichloropyrimidine, and 1-methylpiperazine gave II. I inhibit production of cytokines involved in inflammatory processes and are, thus, useful for treating diseases and pathol. conditions involving inflammation, such as

II

Ι

chronic inflammatory disease (no data). The compds. are also useful for treating diseases or conditions related to oncol. and anticoagulant or fibrinolytic therapy (no data). Also disclosed are processes for preparing these compds. and pharmaceutical compns. comprising them. ΤТ 761428-81-3P, 1-Methyl-7-(2-methylaminopyrimidin-4-yloxy)-1Hindole-2-carboxylic acid N-[5-tert-butyl-2-methoxy-3-(morpholin-4ylmethyl)phenyl]amide 761428-82-4P, 1-Methyl-7-(2-methylaminopyrimidin-4-yloxy)-1H-indole-2-carboxylic acid N-[5-tert-butyl-2-methoxy-3-(4-methylpiperazin-1-ylmethyl)phenyl]amide 761428-89-1P, 1-Methyl-7-[2-(4-methylpiperazin-1-yl)pyrimidin-4vloxy]-1H-indole-2-carboxylic acid N-[5-tert-butyl-2-methoxy-3-(pyrrolidin-1-ylmethyl)phenyl]amide 761429-51-0P, 7-[[2-(2-Dimethylaminoethylamino)pyrimidin-4-yl]oxy]-1-methyl-1H-indole-2-carboxylic acid N-[5-tert-butyl-2-methoxy-3-(pyrrolidin-1-ylmethyl)phenyl]amide 761429-52-1P, 7-[[2-(2-Dimethylaminoethylamino)pyrimidin-4-yl]oxy]-1-methyl-1H-indole-2-carboxylic acid N-[5-tert-buty1-2-methoxy-3-(morpholin-4-ylmethy1)pheny1]amide 761429-56-5P, 1-Methyl-7-[2-[(morpholin-4-yl)methyl]pyrimidin-4yloxy]-1H-indole-2-carboxylic acid N-[2-methoxy-3-(morpholin-4-ylmethyl)-5-trifluoromethylphenyl]amide 761429-57-6P, 1-Methyl-7-[2-(4-methylpiperazin-1-yl)pyrimidin-4yloxy]-1H-indole-2-carboxylic acid N-[2-methoxy-3-(morpholin-4-ylmethyl)-5-trifluoromethylphenyl] amide 761429-61-2P, 1-Methyl-7-[2-[(pyrrolidin-1-yl)methyl]pyridin-4yloxy]-1H-indole-2-carboxylic acid N-[2-methoxy-3-(morpholin-4-ylmethyl)-5-trifluoromethylphenyl] amide 761429-63-4P, 1-Methyl-7-[2-[(pyrrolidin-1-yl)methyl]pyrimidin-4yloxy]-1H-indole-2-carboxylic acid N-[2-methoxy-3-(pyrrolidin-1-ylmethyl)-5-trifluoromethylphenyl]amide 761429-64-5P, 7-[[2-[(Dimethylamino)methyl]pyrimidin-4-yl]oxy]-1methyl-1H-indole-2-carboxylic acid N-[2-methoxy-3-(4-methylpiperazin-1-ylmethyl)-5trifluoromethylphenyl]amide RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (cytokine inhibitor; preparation of indolecarboxamides as cytokine inhibitors for treatment of inflammatory diseases, cancer, and other conditions) RN 761428-81-3 CAPLUS CN 1H-Indole-2-carboxamide, N-[5-(1,1-dimethylethyl)-2-methoxy-3-(4morpholinylmethyl)phenyl]-1-methyl-7-[[2-(methylamino)-4-pyrimidinyl]oxy]-

(CA INDEX NAME)

CN 1H-Indole-2-carboxamide, N-[5-(1,1-dimethylethyl)-2-methoxy-3-[(4-methyl-1-piperazinyl)methyl]phenyl]-1-methyl-7-[[2-(methylamino)-4-pyrimidinyl]oxy]-(CA INDEX NAME)

RN 761428-89-1 CAPLUS

CN 1H-Indole-2-carboxamide, N-[5-(1,1-dimethylethyl)-2-methoxy-3-(1-pyrrolidinylmethyl)phenyl]-1-methyl-7-[[2-(4-methyl-1-piperazinyl)-4-pyrimidinyl]oxy]- (CA INDEX NAME)

RN 761429-51-0 CAPLUS

CN 1H-Indole-2-carboxamide, 7-[[2-[[2-(dimethylamino)ethyl]amino]-4-pyrimidinyl]oxy]-N-[5-(1,1-dimethylethyl)-2-methoxy-3-(1-pyrrolidinylmethyl)phenyl]-1-methyl- (CA INDEX NAME)

RN 761429-52-1 CAPLUS

CN 1H-Indole-2-carboxamide, 7-[[2-[[2-(dimethylamino)ethyl]amino]-4-

RN 761429-56-5 CAPLUS

CN 1H-Indole-2-carboxamide, N-[2-methoxy-3-(4-morpholinylmethyl)-5-(trifluoromethyl)phenyl]-1-methyl-7-[[2-(4-morpholinylmethyl)-4-pyrimidinyl]oxy]- (CA INDEX NAME)

RN 761429-57-6 CAPLUS

CN 1H-Indole-2-carboxamide, N-[2-methoxy-3-(4-morpholinylmethyl)-5-(trifluoromethyl)phenyl]-1-methyl-7-[[2-(4-methyl-1-piperazinyl)-4-pyrimidinyl]oxy]- (CA INDEX NAME)

RN 761429-61-2 CAPLUS

CN 1H-Indole-2-carboxamide, N-[2-methoxy-3-(4-morpholinylmethyl)-5-(trifluoromethyl)phenyl]-1-methyl-7-[[2-(1-pyrrolidinylmethyl)-4-pyridinyl]oxy]- (CA INDEX NAME)

RN 761429-63-4 CAPLUS

CN 1H-Indole-2-carboxamide, N-[2-methoxy-3-(1-pyrrolidinylmethyl)-5-(trifluoromethyl)phenyl]-1-methyl-7-[[2-(1-pyrrolidinylmethyl)-4-pyrimidinyl]oxy]- (CA INDEX NAME)

RN 761429-64-5 CAPLUS

CN 1H-Indole-2-carboxamide, 7-[[2-[(dimethylamino)methyl]-4-pyrimidinyl]oxy]-N-[2-methoxy-3-[(4-methyl-1-piperazinyl)methyl]-5-(trifluoromethyl)phenyl]-1-methyl- (CA INDEX NAME)

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD

(2 CITINGS)

REFERENCE COUNT: 64 THERE ARE 64 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1998:745036 CAPLUS <<LOGINID::20091013>>

DOCUMENT NUMBER: 130:3775

TITLE: Preparation of

N-[2-(4-

carboxamidocyclohexyl)ethyl]tetrahydroisoquinolines as

dopamine D3 receptor ligands

INVENTOR(S): Branch, Clive Leslie; Johnson, Christopher Norbert;

Stemp, Geoffrey

PATENT ASSIGNEE(S): Smithkline Beecham PLC, UK

SOURCE: PCT Int. Appl., 98 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

```
DATE
     PATENT NO.
                          KIND DATE APPLICATION NO.
                 A1 19981112 WO 1998-EP2583 19980427
     _____
     WO 9850364
         W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
              DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG,
              KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,
              NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
              UA, UG, US, UZ, VN, YU, ZW
          RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
              FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
              CM, GA, GN, ML, MR, NE, SN, TD, TG
                           A1 19981112
     CA 2288899
                                               CA 1998-2288899
                                                                          19980427
     AU 9876518
                            Α
                                   19981127
                                               AU 1998-76518
                                                                         19980427
     AU 725491
                           В2
                                   20001012
     EP 983244
                           A1 20000308
                                               EP 1998-924262
                                                                         19980427
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, FI
     TR 9902724

HU 2000003608

A2 20010328

HU 200003608

A3 20010628

BR 9809591

A 20010911

BR 1998-9591

JP 2002501506

T 20020115

JP 1998-547712

ZA 9803659

A 19991101

ZA 1998-3659

NO 9905338

MX 9910101

A 20000430

MX 1999-10101

US 6465485

B1 20021015

US 2000-656379

GB 1997-8976
     TR 9902724
                            Т2
                                   20000421
                                                TR 1999-2724
                                                                          19980427
                                                                          19980427
                                               JP 1998-547712
                                                                          19980427
                                                                          19980430
                                               US 2000-656379 20000906
GB 1997-8976 A 19970503
GB 1997-23294 A 19971104
WO 1998-EP2583 W 19980427
US 1999-423163 B1 19991100
                                                                          19991102
PRIORITY APPLN. INFO.:
                          MARPAT 130:3775
OTHER SOURCE(S):
     R1CH2CH2ZNR2COR (Z = 1, 4-cyclohexylene)[I; R = (un) substituted Ph,
     -heteroaryl, (E)-CH:CHPh, etc.; R1 = benzene ring-(un)substituted
     1,2,3,4-tetrahydroisoquinolin-2-yl; R2 = H or alkyl] were prepared Thus,
     8-(2-hydroxyethyl)-1,4-dioxaspiro[4.5]decane was oxidized and the product
     reductively aminated by 7-cyano-1,2,3,4-tetrahydroisoguinoline to give,
     after deprotection and reductive amination, cis- and
     trans-2-[2-(4-aminocyclohexyl)ethyl]-7-cyano-1,2,3,4-
     tetrahydroisoquinoline. The latter mixture was treated with
     indole-2-carboxylic acid under amidation conditions to give trans-I (R =
     2-indolyl, R1 = 7-cyano-1,2,3,4-tetrahydroisoquinolin-2-yl, R2 = H). Data
     for biol. activity of I were given.
                    215802-51-0P 215803-53-5P
ΤТ
     215802-29-2P
     215803-62-6P
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
         (preparation of N-{2-(4-carboxamidocyclohexyl)ethyl]tetrahydroisoquinolines
         as dopamine D3 receptor ligands)
RN
     215802-29-2 CAPLUS
     1H-Indole-2-carboxamide, N-[trans-4-[2-(7-cyano-3,4-dihydro-2(1H)-
CN
     isoquinoliny1)ethy1]cyclohexy1]-5-methoxy- (CA INDEX NAME)
```

Relative stereochemistry.

RN 215802-51-0 CAPLUS

CN 1H-Indole-2-carboxamide, N-[trans-4-[2-(7-cyano-3,4-dihydro-2(lH)-isoquinolinyl)ethyl]cyclohexyl]-6-methoxy- (CA INDEX NAME)

Relative stereochemistry.

RN 215803-53-5 CAPLUS

CN 1H-Indole-2-carboxamide, N-[trans-4-[2-(6-cyano-3,4-dihydro-2(1H)-isoquinolinyl)ethyl]cyclohexyl]-5-methoxy- (CA INDEX NAME)

Relative stereochemistry.

RN 215803-62-6 CAPLUS

CN 1H-Indole-2-carboxamide, N-[trans-4-[2-(6-cyano-3,4-dihydro-2(1H)-isoquinolinyl)ethyl]cyclohexyl]-6-methoxy- (CA INDEX NAME)

Relative stereochemistry.

OS.CITING REF COUNT: 15 THERE ARE 15 CAPLUS RECORDS THAT CITE THIS

RECORD (19 CITINGS)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=>

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:ssptajem1625

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

NEWS 1 Web Page for STN Seminar Schedule - N. America

NEWS 2 AUG 10 Time limit for inactive STN sessions doubles to 40 minutes

NEWS 3 AUG 18 COMPENDEX indexing changed for the Corporate Source (CS) field

NEWS 4 AUG 24 ENCOMPLIT/ENCOMPLIT2 reloaded and enhanced

NEWS 5 AUG 24 CA/Caplus enhanced with legal status information for U.S. patents

NEWS 6 SEP 09 50 Millionth Unique Chemical Substance Recorded in CAS REGISTRY

NEWS 7 SEP 11 WPIDS, WPINDEX, and WPIX now include Japanese FTERM thesaurus

NEWS EXPRESS MAY 26 09 CURRENT WINDOWS VERSION IS V8.4, AND CURRENT DISCOVER FILE IS DATED 06 APRIL 2009.

NEWS HOURS STN Operating Hours Plus Help Desk Availability NEWS LOGIN Welcome Banner and News Items

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN customer agreement. This agreement limits use to scientific research. Use for software development or design, implementation of commercial

gateways, or use of CAS and STN data in the building of commercial products is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 14:21:52 ON 14 OCT 2009

=> FIL REGISTRY
COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE TOTAL
ENTRY SESSION
0.22 0.22

FILE 'REGISTRY' ENTERED AT 14:22:19 ON 14 OCT 2009 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ${\tt ZIC/VINITI}$ data file provided by InfoChem.

STRUCTURE FILE UPDATES: 13 OCT 2009 HIGHEST RN 1188021-47-7 DICTIONARY FILE UPDATES: 13 OCT 2009 HIGHEST RN 1188021-47-7

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 26, 2009.

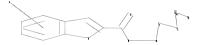
COPYRIGHT (C) 2009 American Chemical Society (ACS)

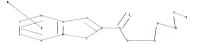
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

Uploading C:\Program Files\STNEXP\Queries\10-597,753a.str





```
chain nodes :
10 11 12 13 15 16 18 20 22
ring nodes :
1 2 3 4 5 6 7 8 9
chain bonds :
8-10 10-11 10-12 12-13 13-18 15-22 18-20 20-22
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-9 7-8 8-9
exact/norm bonds :
5-7 6-9 7-8 8-9 10-11 10-12 13-18 15-22 18-20 20-22
exact bonds :
8-10 12-13
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6
isolated ring systems :
containing 1 :
G1:C,O,N
```

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:CLASS 11:CLASS 12:CLASS 13:Atom 15:Atom 16:CLASS 17:Atom 18:CLASS 20:CLASS

Match level :

22:CLASS

L1 STRUCTURE UPLOADED

=> d 11

L1 HAS NO ANSWERS

STR

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

Structure attributes must be viewed using STN Express query preparation.

=> s sss sam

ENTER LOGIC EXPRESSION, QUERY NAME, OR (END): ENTER LOGIC EXPRESSION, QUERY NAME, OR (END):0 SAMPLE IS IGNORED AS A SCOPE FOR THIS SEARCH L2 946538 0

=> d 11

L1 HAS NO ANSWERS

STR

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

Structure attributes must be viewed using STN Express query preparation.

=> s 11 sss sam

SAMPLE SEARCH INITIATED 14:23:36 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 58740 TO ITERATE

3.4% PROCESSED 2000 ITERATIONS 0 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

1160335 TO 1189265 PROJECTED ITERATIONS:

PROJECTED ANSWERS: 0 TO

0 SEA SSS SAM L1

=> s l1 sss full

FULL SEARCH INITIATED 14:23:43 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 1173003 TO ITERATE

95.9% PROCESSED 1125066 ITERATIONS

48 ANSWERS

100.0% PROCESSED 1173003 ITERATIONS

48 ANSWERS

SEARCH TIME: 00.00.32

48 SEA SSS FUL L1 T.4

=> file caplus

COST IN U.S. DOLLARS SINCE FILE TOTAL SESSION ENTRY

FULL ESTIMATED COST 192.67 192.89

FILE 'CAPLUS' ENTERED AT 14:24:34 ON 14 OCT 2009 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 14 Oct 2009 VOL 151 ISS 16

FILE LAST UPDATED: 13 Oct 2009 (20091013/ED)

REVISED CLASS FIELDS (/NCL) LAST RELOADED: Aug 2009

USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Aug 2009

CAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2009.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 14 L5 8 L4

=> d ibib abs hitstr 1-YOU HAVE REQUESTED DATA FROM 8 ANSWERS - CONTINUE? Y/(N):y

L5 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:1045236 CAPLUS <<LOGINID::20091014>>

DOCUMENT NUMBER: 149:307680

TITLE: Preparation of N-piperidinylethylcyclohexyl indolecarboxamide derivatives as inhibitors of

chemokine receptors or macrophage protein

INVENTOR(S): Hersperger, Rene; Janser, Philipp; Miltz, Wolfgang

PATENT ASSIGNEE(S): Novartis AG, Switz. SOURCE: PCT Int. Appl., 70pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008101905	A1	20080828	WO 2008-EP51951	20080218
W: AE, AG, A	L, AM, AO	, AT, AU, A	AZ, BA, BB, BG, BH,	BR, BW, BY, BZ,
CA, CH, C	N, CO, CR	, CU, CZ, D	DE, DK, DM, DO, DZ,	EC, EE, EG, ES,
FI, GB, G	D, GE, GH	, GM, GT, H	HN, HR, HU, ID, IL,	IN, IS, JP, KE,
KG, KM, I	N, KP, KR	, KZ, LA, L	LC, LK, LR, LS, LT,	LU, LY, MA, MD,
ME, MG, N	K, MN, MW	, MX, MY, M	4Z, NA, NG, NI, NO,	NZ, OM, PG, PH,
PL, PT, F	O, RS, RU	, SC, SD, S	SE, SG, SK, SL, SM,	SV, SY, TJ, TM,
TN, TR,	Γ, TZ, UA	., UG, US, U	JZ, VC, VN, ZA, ZM,	ZW
RW: AT, BE, I	G, CH, CY	, CZ, DE, D	OK, EE, ES, FI, FR,	GB, GR, HR, HU,
IE, IS,	Γ, LT, LU	, LV, MC, M	MT, NL, NO, PL, PT,	RO, SE, SI, SK,

TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM 20080218 AU 2008219317 Α1 20080828 AU 2008-219317 KR 2009103943 20091001 KR 2009-717079 20080218 Α PRIORITY APPLN. INFO.: EP 2007-102622 20070219 WO 2008-EP51951 W 20080218 MARPAT 149:307680 OTHER SOURCE(S):

GΙ

AB Title compds. represented by the formula I [wherein X = CH2 or NH; n = 1 or 2; R = (un)substituted (hetero)alkyl or (hetero)aryl; and pharmaceutically acceptable salts, esters or prodrugs thereof] were prepared as inhibitors of chemokine receptors or macrophage protein. The process of preparation of the invention compds. was described, 29 final compound were obtained, such as II. I had IC50 values between 0.0002 and 10 μ M in CCR2/CCR5 membrane and functional assay. Thus, I and their pharmaceutical compns. are useful for the treatment of an autoimmune or inflammatory disease or condition.

Me

ΙI

IT 1050425-64-3P

RL: PAC (Pharmacological activity); PRPH (Prophetic); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of N-[(piperidinyl)ethylcyclohexyl] indole-2-carboxamide derivs. as inhibitors of chemokine receptors or macrophage protein)

RN 1050425-64-3 CAPLUS

CN 1H-Indole-2-carboxamide, 4-(cyclobutylmethoxy)-N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]-, hydrochloride (1:1) (CA INDEX NAME)

● HCl

```
ΙT
     1050424-98-0P
                     1050425-00-7P
                                      1050425-01-8P
     1050425-03-0P
                     1050425-05-2P
                                      1050425-08-5P
     1050425-12-1P
                      1050425-15-4P
                                      1050425-18-7P
     1050425-21-2P
                     1050425-23-4P
                                      1050425-24-5P
     1050425-26-7P
                     1050425-29-0P
                                      1050425-31-4P
     1050425-34-7P
                     1050425-36-9P
                                      1050425-37-0P
                     1050425-43-8P
     1050425-40-5P
                                      1050425-45-0P
                     1050425-51-8P
     1050425-48-3P
                                      1050425-53-0P
     1050425-54-1P
                     1050425-55-2P
                                      1050425-56-3P
     1050425-59-6P
                     1050425-61-0P
```

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of N-[(piperidinyl)ethylcyclohexyl] indole-2-carboxamide derivs. as inhibitors of chemokine receptors or macrophage protein) 1050424-98-0 CAPLUS

CN 1H-Indole-2-carboxamide, 4-(cyclobutylmethoxy)-N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN

CN 1H-Indole-2-carboxamide, N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]-4-[(tetrahydro-3-furanyl)methoxy]- (CA INDEX NAME)

Absolute stereochemistry.

RN 1050425-01-8 CAPLUS

CN 1H-Indole-2-carboxamide, 4-(3-furanylmethoxy)-N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 1050425-03-0 CAPLUS

CN 1H-Indole-2-carboxamide, 4-[(2-chloro-4-thiazolyl)methoxy]-N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 1050425-05-2 CAPLUS

CN 1H-Indole-2-carboxamide, N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]-4-[(6-methoxy-3-pyridinyl)methoxy]- (CA INDEX NAME)

Absolute stereochemistry.

RN 1050425-08-5 CAPLUS

CN 1H-Indole-2-carboxamide, N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]-4-[(4,5,6,7-tetrahydro-4-oxo-3-

benzofuranyl)methoxy]- (CA INDEX NAME)

Absolute stereochemistry.

RN 1050425-12-1 CAPLUS

CN 1H-Indole-2-carboxamide, N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]-4-[(4,5,6,7-tetrahydro-6,6-dimethyl-4-oxo-3-benzofuranyl)methoxy]- (CA INDEX NAME)

Absolute stereochemistry.

RN 1050425-15-4 CAPLUS

CN 1H-Indole-2-carboxamide, 4-[[(3S)-2,3-dihydro-3-benzofurany1]methoxy]-N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-

piperidinyl]ethyl]cyclohexyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 1050425-18-7 CAPLUS

CN 1H-Indole-2-carboxamide, 4-[(2,3-dihydro-6-methoxy-3-benzofuranyl)methoxy]-N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 1050425-21-2 CAPLUS

CN 1H-Indole-2-carboxamide, N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]-4-[(4-methoxy-3-benzofuranyl)methoxy]-(CA INDEX NAME)

Absolute stereochemistry.

RN 1050425-23-4 CAPLUS

CN 1H-Indole-2-carboxamide, 4-[(4,6-difluoro-3-benzofuranyl)methoxy]-N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 1050425-24-5 CAPLUS

CN 1H-Indole-2-carboxamide, 4-[(5-chloro-3-benzofuranyl)methoxy]-N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]-(CA INDEX NAME)

Absolute stereochemistry.

RN 1050425-26-7 CAPLUS

CN 1H-Indole-2-carboxamide, N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]-4-[(6-methoxy-3-benzofuranyl)methoxy]-(CA INDEX NAME)

Absolute stereochemistry.

RN 1050425-29-0 CAPLUS

CN 1H-Indole-2-carboxamide, 4-[(6-ethoxy-3-benzofuranyl)methoxy]-N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]-(CA INDEX NAME)

RN 1050425-31-4 CAPLUS

CN 1H-Indole-2-carboxamide, 4-[[6-(cyclopropylmethoxy)-3-benzofuranyl]methoxy]-N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



RN 1050425-34-7 CAPLUS

CN 1H-Indole-2-carboxamide, 4-[[6-(2-ethoxyethoxy)-3-benzofuranyl]methoxy]-N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]- (CA INDEX NAME)

Absolute stereochemistry.

OEt

RN 1050425-36-9 CAPLUS

CN 1H-Indole-2-carboxamide, N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]-4-[[6-(2-methoxy-1-methylethoxy)-3-benzofuranyl]methoxy]- (CA INDEX NAME)

PAGE 1-B

OMe

RN 1050425-37-0 CAPLUS

CN 1H-Indole-2-carboxamide, N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]-4-[[6-[2-(1-methylethoxy)ethoxy]-3-benzofuranyl]methoxy]- (CA INDEX NAME)

OPr-i

RN 1050425-40-5 CAPLUS

CN 1H-Indole-2-carboxamide, N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]-4-[[6-(3-methoxypropoxy)-3-benzofuranyl]methoxy]- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

RN 1050425-43-8 CAPLUS

CN 1H-Indole-2-carboxamide, 4-[[6-(3-ethoxypropoxy)-3-benzofuranyl]methoxy]-N[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1piperidinyl]ethyl]cyclohexyl]- (CA INDEX NAME)

RN 1050425-45-0 CAPLUS

(CH₂)3

CN 1H-Indole-2-carboxamide, N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]-4-[[6-[[(3S)-tetrahydro-3-furanyl]oxy]-3-benzofuranyl]methoxy]- (CA INDEX NAME)



RN 1050425-48-3 CAPLUS

CN 1H-Indole-2-carboxamide, 4-[(6-fluoro-3-benzofuranyl)methoxy]-N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]-(CA INDEX NAME)

Absolute stereochemistry.

RN 1050425-51-8 CAPLUS

CN 1H-Indole-2-carboxamide, N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]-4-[(7-methoxy-3-benzofuranyl)methoxy]-(CA INDEX NAME)

RN 1050425-53-0 CAPLUS

CN 1H-Indole-2-carboxamide, N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]-4-[2-(2-methoxyphenyl)ethoxy]- (CA INDEX NAME)

Absolute stereochemistry.

RN 1050425-54-1 CAPLUS

CN 1H-Indole-2-carboxamide, N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]-4-[2-(3-methoxyphenyl)ethoxy]- (CA INDEX NAME)

RN 1050425-55-2 CAPLUS

CN 1H-Indole-2-carboxamide, N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]-4-[2-(4-methoxyphenyl)ethoxy]- (CA INDEX NAME)

Absolute stereochemistry.

RN 1050425-56-3 CAPLUS

CN 1H-Indole-2-carboxamide, N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]-4-[2-(2-methoxy-3-pyridinyl)ethoxy]- (CA INDEX NAME)

RN 1050425-59-6 CAPLUS

CN 1H-Indole-2-carboxamide, N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]-4-[2-(6-methoxy-3-pyridinyl)ethoxy]- (CA INDEX NAME)

Absolute stereochemistry.

RN 1050425-61-0 CAPLUS

CN 1H-Indole-2-carboxamide, N-[cis-4-hydroxy-4-[2-[(3S,4S)-4-hydroxy-3-methyl-1-piperidinyl]ethyl]cyclohexyl]-4-[2-(6-methoxy-3-benzofuranyl)ethoxy]-(CA INDEX NAME)

PAGE 1-B

_ OMe

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD

(1 CITINGS)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:944130 CAPLUS <<LOGINID::20091014>>

DOCUMENT NUMBER: 147:300997

TITLE: Benzoyl-piperidine derivatives as 5HT2/D3 modulators

and their preparation, pharmaceutical compositions and

use in the treatment of CNS disorders

INVENTOR(S): Gobbi, Luca; Jaeschke, Georg; Luebbers, Thomas; Roche,

Olivier; Rodriguez Sarmiento, Rosa Maria; Steward,

Lucinda

PATENT ASSIGNEE(S): F. Hoffmann-La Roche AG, Switz.

SOURCE: PCT Int. Appl., 164pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND DATE			Ā	APPL	ICAT	DATE										
				-													
WO 20070935	WO 2007093540 A1 2				20070823 WO 2007-EP51160							20070207					
W: AE,	AG, AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,			
CN,	CO, CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,			
GE,	GH, GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KM,	KN,			
KP,	KR, KZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,			
MN.	MW, MX,	MY,	MZ.	NA,	NG.	NI,	NO.	NZ,	OM,	PG,	PH.	PL,	PT,	RO,			

```
RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT,
             TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
                             TJ, TM
             KG, KZ, MD, RU,
     AU 2007216563
                                 20070823
                                             AU 2007-216563
                           A1
                                                                      20070207
     CA 2640807
                           A1
                                 20070823
                                             CA 2007-2640807
                                                                      20070207
     EP 1987019
                           A1
                                 20081105
                                             EP 2007-704416
                                                                      20070207
             AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR
     JP 2009526807
                           Τ
                                 20090723
                                             JP 2008-554738
                                                                      20070207
     US 20070197531
                           A1
                                 20070823
                                             US 2007-705635
                                                                      20070213
     MX 2008010325
                                 20080820
                                             MX 2008-10325
                                                                      20080812
                           Α
                                             IN 2008-CN4269
     IN 2008CN04269
                                 20090313
                                                                      20080812
                           Α
     CN 101384581
                                 20090311
                                             CN 2007-80005790
                                                                      20080818
                           Α
     NO 2008003584
                                 20081114
                                             NO 2008-3584
                                                                      20080819
                           Α
     KR 2008095899
                                 20081029
                                             KR 2008-722377
                                                                      20080912
                           Α
PRIORITY APPLN. INFO.:
                                             EP 2006-110112
                                                                     20060217
                                             EP 2006-112464
                                                                     20060411
                                             WO 2007-EP51160
                                                                  W
                                                                     20070207
```

OTHER SOURCE(S): MARPAT 147:300997

AB The invention relates to compds. of the general formula I as dual modulators of the 5-HT2a and D3 receptors useful against CNS disorders. Compds. of formula I wherein A is (un)substituted aryl and (un)substituted 5- to 6-membered heteroaryl; n is 1, 2, 3, and 4; r is 0, 1, 2, and 3; Z is cyclopropane, cyclobutane, cyclopentane, and cyclohexane; R1 is C2-6 (aryl)alkenyl, C2-6 (aryl)alkynyl, (un)substituted C1-6 alkyl, C1-6 alkoxy, (un)substituted C3-10 cycloalkyl, etc.; R2 is H, OH, C1-6 alkyl, and halo; and their pharmaceutically acceptable salts thereof are claimed.

Example compound II was prepared by a multistep procedure (procedure given). All the invention compds. were evaluated for their 5HT2a and D3 modulatory activity (some data given). Examples of formulation is also given.

IT 946596-46-9P 946596-47-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of benzoyl-piperidine derivs. as 5HT2/D3 modulators useful in the treatment of CNS disorders)

RN 946596-46-9 CAPLUS

CN 1H-Indole-2-carboxamide, N-[trans-4-[2-[4-(4-fluorobenzoy1)-1-piperidiny1]ethy1]cyclohexy1]-5-(trifluoromethoxy)- (CA INDEX NAME)

Relative stereochemistry.

PAGE 1-B

RN 946596-47-0 CAPLUS

CN 1H-Indole-2-carboxamide, N-[trans-4-[2-[4-(4-fluorobenzoyl)-1-piperidinyl]ethyl]cyclohexyl]-5-methoxy- (CA INDEX NAME)

Relative stereochemistry.

THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD OS.CITING REF COUNT: 1

(1 CITINGS)

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 3 OF 8 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER:

DOCUMENT NUMBER: 145:124467

TITLE: Preparation of pyridine carboxamides as CSF-1R

inhibitors for treating cancer

INVENTOR(S): Almeida, Lynsie; Aquila, Brian; Cook, Don; Cowen,

Scott; Dakin, Les; Ezhuthachan, Jayachandran;

Ioannidis, Stephanos; Lee, Stephen; Lyne, Paul; Pontz,

Timothy; Scott, David; Su, Mei; Zheng, Xiaolan Astrazeneca AB, Swed.; Astrazeneca UK Limited

SOURCE: PCT Int. Appl., 183 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT ASSIGNEE(S):

PA	PATENT NO.					KIND DATE				APPL	ICAT		DATE						
· · ·		5067445 5067445								WO 2	005-	GB49	85		20051222				
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,		
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,		
							ID,												
		KZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	MW,	MX,		
		MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,		
		SG,	SK,	SL,	SM,	SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,		
		VN,	YU,	ZA,	ZM,	ZW													
	RW:	ΑT,	BE,	ВG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,		
		IS,	ΙT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,		
		CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG,	BW,	GH,		
		GM,	ΚE,	LS,	MW,	MΖ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,		
		KG,	ΚZ,	MD,	RU,	ТJ,	TM												
PRIORIT	RIORITY APPLN. INFO.:									US 2	004-	6391	77P]	P 20041222				
OTHER SO					CASREACT 145:124				24467; MARPAT 145:124467										

GΙ

$$\begin{bmatrix} \mathbb{R}^2 \\ \mathbb{R}^3 \\ \mathbb{R}^3 \end{bmatrix}_n$$

The title compds. I [A = Ph, 5 or 6 membered heterocyclyl, optionally]AΒ fused to a 5 or 6 membered carbocyclyl or heterocyclyl, wherein if said heterocyclyl ring contains an NH moiety that N may be optionally substituted by R5; R5 = alkyl, alkanoyl, Bn, carbamoyl, etc.; each R1 = independently halo, NO2, CN, OH, NH2, (un) substituted alk(en)yl, N,N'-dialkylureido etc.; n = 0-4; R2 = H, halo, (un)substituted alkanoyl, etc.; R3 = halo, OH, CN, Me, OMe, CH2OH; R4 = halo, ureido, sulfamoyl, carboxy, etc.; m = 0-4; with the exclusion of certain compds.] which possess colony stimulating factor 1 receptor (CSF-1R) kinase inhibitory activity and are accordingly useful for their anti cancer activity and thus in methods of treatment of the human or animal body, were prepared Thus, reacting 5-amino-2-methyl-N-(pyridin-3-yl)benzamide (preparation given) with 3-chlorobenzoic acid in DMF in the presence of HATU afforded II which showed IC50 of 12 μM when tested in CSF-1R in vitro AlphaScreen assay. The invention also relates to processes for the manufacture of said compds. I, to pharmaceutical compns. containing them and to their use in the manufacture

of medicaments of use in the production of an anti-cancer effect in a warm blooded animal such as man.

IT 896157-20-3P, 5-Methoxy-N-[4-Methyl-3-[[(pyridin-3-yl)amino]carbonyl]phenyl]-1H-indole-2-carboxamide
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
 (Uses)

(drug candidate; preparation of pyridine carboxamides as CSF-1R inhibitors for treating cancer)

RN 896157-20-3 CAPLUS

CN 1H-Indole-2-carboxamide, 5-methoxy-N-[4-methyl-3-[(3-pyridinylamino)carbonyl]phenyl]- (CA INDEX NAME)

THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD OS.CITING REF COUNT: 5

(5 CITINGS)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 4 OF 8 CAPLUS COPYRIGHT 2009 ACS on STN

2006:631355 CAPLUS <<LOGINID::20091014>> ACCESSION NUMBER:

DOCUMENT NUMBER: 145:103567

TITLE: Preparation of pyridine carboxamides as anti-cancer

INVENTOR(S): Almeida, Lynsie; Aquila, Brian; Cook, Don; Cowen,

> Scott; Dakin, Les; Ezhuthachan, Jayachandran; Ioannidis, Stephanos; Lee, John W.; Lee, Stephen; Lyne, Paul Dermot; Pontz, Timothy; Scott, David; Su,

Mei; Zheng, Xiaolan

Astrazeneca AB, Swed.; Astrazeneca UK Limited PATENT ASSIGNEE(S):

SOURCE: PCT Int. Appl., 186 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.																	
WO					A1 20060629								0051	222			
	W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS	JP,	KE,	KG,	KM,	KN,	KP,	KR,
		KZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY	, MA,	MD,	MG,	MK,	MN,	MW,	MX,
		MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH	I, PL,	PT,	RO,	RU,	SC,	SD,	SE,
		SG,	SK,	SL,	SM,	SY,	ТJ,	TM,	TN,	TR	₹, TT,	TZ,	UA,	UG,	US,	UZ,	VC,
		VN,	YU,	ZA,	ZM,	ZW											
	RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE	E, ES,	FI,	FR,	GB,	GR,	HU,	ΙE,
		IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT	, RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML	, MR,	ΝE,	SN,	TD,	TG,	BW,	GH,
		GM,	ΚE,	LS,	MW,	ΜZ,	NΑ,	SD,	SL,	SZ	Z, TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
		KG,	KΖ,	MD,	RU,	ТJ,	TM										
AU	2005	3178	70		A1		2006	0629		AU	2005-	3178	70		2	0051	222
CA	2589	773			A1						2005-					0051	222
EΡ	1831	198			A1		2007	0912		EΡ	2005-	8209	52		2	0051	222
EP	1831	198			В1		2009	0408									
	R:										E, ES,						
		IS,	ΙΤ,	LI,	LT,	LU,	LV,	MC,	NL,	PL	, PT,	RO,	SE,	SI,	SK,	TR,	HR
	2008						2008	0717		JΡ	2007-	5476	42		2	0051	222
BR	2005	1918	1		A2						2005-						
AT	2005 4279	46			\mathbf{T}						2005-						
NO	2007	0027	84		A						2007-						
	2007										2007-					0070	
	2007				A		2007	_			2007-					0070	_
	2007				Α		2007				2007-					0070	
	2007				Α		2007				2007-					0070	
	1011				Α		2008	0220			2005-					0070	
IORIT	ORITY APPLN. INFO.:										2004-						
										WO	2005-	GB49	86	١	₩ 2	0051	222

OTHER SOURCE(S): CASREACT 145:103567; MARPAT 145:103567

GΙ

$$\begin{bmatrix} R^2 \\ R^3 \\ N \\ N \end{bmatrix}_n$$

$$\begin{bmatrix} R^4 \end{bmatrix}_m$$

The title compds. I [A = carbocyclyl, heterocyclyl, wherein if said AΒ heterocyclyl ring contains an NH moiety that N may be optionally substituted by R5; R5 = alkyl, alkanoyl, Bn, carbamoyl, etc.; each R1 = independently halo, NO2, CN, OH, NH2, (un) substituted alk(en)yl, N,N'-dialkylureido etc.; n=0-4; R2=H, halo, (un)substituted alkanoyl, etc.; R3= halo, OH, CN, Me, OMe, CH2OH; R4= halo, ureido, sulfamoyl, carboxy, etc.; m = 0-4; with the exclusion of certain compds.] which possess B-Raf inhibitory activity and are accordingly useful for their anti cancer activity and thus in methods of treatment of the human or animal body, were prepared Thus, reacting 5-amino-2-methyl-N-(pyridin-3-yl) benzamide (preparation given) with 3-chlorobenzoic acid in DMF in the presence of HATU afforded II which showed IC50 of 0.057 μM when tested in B-Raf in vitro ELISA assay. The invention also relates to processes for the manufacture of said compds. I, to pharmaceutical compns, containing them and to their use in the manufacture of medicaments of use in the production of an anti-cancer effect in a warm blooded animal such as man.

IT 896157-20-3P, 5-Methoxy-N-[4-Methyl-3-[[(pyridin-3-yl)amino]carbonyl]phenyl]-1H-indole-2-carboxamide
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of pyridine carboxamides as B-Raf inhibitors for treating cancer)

RN 896157-20-3 CAPLUS

CN 1H-Indole-2-carboxamide, 5-methoxy-N-[4-methyl-3-[(3-pyridinylamino)carbonyl]phenyl]- (CA INDEX NAME)

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 5 OF 8 CAPLUS COPYRIGHT 2009 ACS on STN L5

ACCESSION NUMBER: 2005:902881 CAPLUS <<LOGINID::20091014>>

DOCUMENT NUMBER: 143:248292

TITLE: Preparation of 1H-indole-2-carboxylic acid

N-(piperidin-4-yl) amides and related derivatives as

chemokine receptor, particularly CCR2 and CCR5

antagonists

INVENTOR(S): Hersperger, Rene; Janser, Philipp; Pfenninger, Emil;

Wuethrich, Hans Juerg; Miltz, Wolfgang

PATENT ASSIGNEE(S): Novartis A.-G., Switz.; Novartis Pharma G.m.b.H.

PCT Int. Appl., 240 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA.	PATENT NO.				KIND DATE				APPLICATION NO.						DATE			
									WO 2005-EP1362									
	W: AE CN GE LK NO		AL, CR, GM, LS,	AM, CU, HR, LT, PG,	AT, CZ, HU, LU, PH,	AU, DE, ID, LV, PL,	AZ, DK, IL, MA, PT,	BA, DM, IN, MD, RO,	BB, DZ, IS, MG, RU,	BG, EC, JP, MK, SC,	BR, EE, KE, MN, SD,	BW, EG, KG, MW, SE,	BY, ES, KP, MX, SG,	BZ, FI, KR, MZ, SK,	CA, GB, KZ, NA, SL,	CH, GD, LC, NI, SY,	SM	
	RW: BW AZ EE RO	GH, BY, ES, SE,	GM, KG, FI, SI,	KE, KZ, FR, SK,	LS, MD, GB, TR,	MW, RU, GR,	MZ, TJ, HU,	NA, TM, IE,	SD, AT, IS,	SL, BE, IT,	SZ, BG, LT,	TZ, CH, LU,	UG, CY, MC,	ZM, CZ, NL,	ZW, DE, PL,	AM, DK, PT,		
ΑIJ	MR 2005212	NE,		•		2005	0825		AU 2	005-	2125	10		2	0050	210		
	2005212													_				
CA	2554642			A1		2005	0825		CA 2	005-	2554	642		2	0050	210		
EP	1720859			A2		2006	1115		EP 2	005-	7073	21		2	0050	210		
	R: AT	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,		
		IT,			LU,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	AL,	BA,		
		LV,				2000			~ ^			0000		•		010		
CN	1946713 2005007	- 1 -		A		2007 2007	0411		CN 2	005-	8001	2297		2	0050	210		
BR	2005007	o 1 /		A					BR 2	005-	7617	4.0		2	0050	210		
OI	200/322	1 / 0		_		2007			JP Z	006-	5525	49		2	0050			
ZA	2006006	180		A		2008				006-					0060			
	2006CN0					2007 2006			MZ 3	006-	O160	30		2	0060	011		
	2006009					2006				006- 006-								
	2007027. 883236					2007			KK Z	006-	1103	41		۷	0000	900		
	2006004						-		NIO 2	006-	4077			2	0060	011		
	2007015																	
	Y APPLN.			АТ		2007	0 / 0 3			004-								
. 1/1/01/11.	T VIIIII.	T141 ()	• •							005-								
THER SO	OURCE(S)	:		CAS	REAC	т 14	3:24							4				
GI									,			•						

^{*} STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Title compds. I [wherein Z = CH2 and derivs., NH and derivs., O, S; R, R1AB = independently OH and derivs., (un)substituted hetero/aryl, arylalkyl, etc.; X = (un)substituted hetero/cycloalkyl, hetero/aryl; Q = linker of between 1 and 3 atoms length; Y = (un)substituted hetero/cycloalkyl, bridged hetero/cycloalkyl, hetero/aryl, fused aryl-heterocycloalkyl; and their pharmaceutically acceptable salts, esters and prodrugs] were prepared as CCR2 and CCR5 antagonists. For example, reacting [1-[2-(azepan-1-yl)ethyl]piperidin-4-yl]amine•3HCl (preparation given) and 4-(5-chlorobenzofuran-3-ylmethoxy)-1H-indole-2-carboxylic acid (preparation given) gave amide II in 57% yield. I had IC50 between 0.0003 and 10 μM and between 0.004 and 10 μM in CCR2 and CCR5 membrane binding assays. I are effective as dual CCR2 and CCR5 antagonists. I are useful for treating autoimmune and inflammatory diseases, HIV infection and AIDS. ΙT 863250-06-0P, 4-Isobutoxy-1H-indole-2-carboxylic acid N-[4-[2-(azepan-1-yl)ethyl]phenyl]amide 863250-07-1P, trans-4-Isobutoxy-1H-indole-2-carboxylic acid [4-[[methyl(tetrahydropyran-4-yl)amino]methyl]cyclohexyl]amide 863250-08-2P, 4-Isobutoxy-1H-indole-2-carboxylic acid N-[4-[[methyl(tetrahydropyran-4-yl)amino]methyl]phenyl]amide 863250-09-3P, 4-Isobutoxy-1H-indole-2-carboxylic acid N-[4-[(R)-1-[methyl(tetrahydropyran-4-yl)amino]ethyl]phenyl]amide863252-49-7P, 4-(5-Chlorobenzofuran-3-ylmethoxy)-1H-indole-2- $\verb| carboxylic acid N-[4-[2-(piperidin-1-yl)ethyl]phenyl] amide \\$ 863252-51-1P, 4-(5-Chlorobenzofuran-3-ylmethoxy)-1H-indole-2carboxylic acid N-[4-[2-(4-hydroxypiperidin-1-yl)ethyl]phenyl]amide 863252-87-3P, 4-Isobutoxy-1H-indole-2-carboxylic acid [4-[[methyl(tetrahydropyran-4-yl)amino]methyl]cyclohexyl]amide RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (drug candidate; preparation of chemokine receptor antagonists, particularly 1H-indole-2-carboxylic acid N-(piperidin-4-yl)amides) 863250-06-0 CAPLUS RN 1H-Indole-2-carboxamide, N-[4-[2-(hexahydro-1H-azepin-1-yl)ethyl]phenyl]-4-CN

(2-methylpropoxy) - (CA INDEX NAME)

RN 863250-07-1 CAPLUS
CN 1H-Indole-2-carboxamide, 4-(2-methylpropoxy)-N-[trans-4[[methyl(tetrahydro-2H-pyran-4-yl)amino]methyl]cyclohexyl]- (CA INDEX NAME)

Relative stereochemistry.

RN 863250-08-2 CAPLUS

CN 1H-Indole-2-carboxamide, 4-(2-methylpropoxy)-N-[4-[[methyl(tetrahydro-2H-pyran-4-yl)amino]methyl]phenyl]- (CA INDEX NAME)

RN 863250-09-3 CAPLUS

CN 1H-Indole-2-carboxamide, 4-(2-methylpropoxy)-N-[4-[(1R)-1-[methyl(tetrahydro-2H-pyran-4-yl)amino]ethyl]phenyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 863252-49-7 CAPLUS

CN 1H-Indole-2-carboxamide, 4-[(5-chloro-3-benzofuranyl)methoxy]-N-[4-[2-(1-piperidinyl)ethyl]phenyl]- (CA INDEX NAME)

RN 863252-51-1 CAPLUS

CN 1H-Indole-2-carboxamide, 4-[(5-chloro-3-benzofuranyl)methoxy]-N-[4-[2-(4-hydroxy-1-piperidinyl)ethyl]phenyl]- (CA INDEX NAME)

$$\begin{array}{c} \text{CH}_2 \\ \text{O} \\ \text{O} \\ \text{O} \\ \text{C} \\ \text{NH} \end{array} \begin{array}{c} \text{CH}_2 \\ \text{CH}_2 \\ \text{CH}_2 \\ \text{OH} \end{array}$$

RN 863252-87-3 CAPLUS

CN 1H-Indole-2-carboxamide, 4-(2-methylpropoxy)-N-[4-[[methyl(tetrahydro-2H-pyran-4-yl)amino]methyl]cyclohexyl]- (CA INDEX NAME)

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD

(4 CITINGS)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2004:916840 CAPLUS <<LOGINID::20091014>>

DOCUMENT NUMBER: 142:85848

TITLE: A novel class of achiral seco-analogs of CC-1065 and

the duocarmycins: design, synthesis, DNA binding, and

anticancer properties

AUTHOR(S): Kupchinsky, Stanley; Centioni, Sara; Howard, Tiffany;

Trzupek, John; Roller, Shane; Carnahan, Virginia; Townes, Heather; Purnell, Bethany; Price, Carly; Handl, Heather; Summerville, Kaitlin; Johnson, Kimberly; Toth, James; Hudson, Stephen; Kiakos,

Konstantinos; Hartley, John A.; Lee, Moses Department of Chemistry, Furman University,

Greenville, SC, 29613, USA

SOURCE: Bioorganic & Medicinal Chemistry (2004), 12(23),

6221-6236

CODEN: BMECEP; ISSN: 0968-0896

PUBLISHER: Elsevier Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

CORPORATE SOURCE:

OTHER SOURCE(S): CASREACT 142:85848

GΙ

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

The synthesis, DNA binding properties, and in vitro and in vivo anticancer activity of fifteen achiral seco-cyclopropylindoline (or achiral seco-CI) analogs of CC-1065 and the duocarmycins are described. The achiral seco-CI analogs contain a 4-hydroxyphenethyl halide moiety that is attached to a wide range of indole, benzimidazole, pyrrole, and pyridyl-containing noncovalent binding components. The 4-hydroxyphenethyl halide moiety represents the simplest mimic of the seco-cyclopropylpyrroloindoline (seco-CPI) pharmacophore found in the natural products, and it lacks a chiral center. The sequence and minor groove specificity of the achiral compds. was ascertained using a Taq DNA polymerase stop assay and a thermal induced DNA cleavage experiment using either a fragment of pBR322 or pUC18 plasmid DNA. For example, seco-CI-InBf (I) and seco-CI-TMI (II) demonstrated specificity for AT-rich sequences, particularly by reacting with the underlined adenine-N3 position of 5'-AAAA(865)-3'. This is also the sequence that CC-1065 and adozelesin prefer to alkylate. The achiral seco-CI compds. were subjected to cytotoxicity studies against several human (K562, LS174T, PC3, and MCF-7) and murine cancer cell lines (L1210 and P815). Following continuous drug exposure, the achiral compds. were found to be cytotoxic, with IC50 values in the μM range. The carbamate protected compound III was significantly less cytotoxic than agent II, supporting the hypothesis that loss of HCl and formation of a spiro[2,5]cyclopropylcyclohexadienone intermediate is necessary for biol. activity. The achiral seco-CI compds. I and II were submitted to the National Cancer Institute for further cytotoxicity screening against a panel of 60 different human cancer cell lines. Both compds. showed significant activity, particularly against several solid tumor cell lines. Flow cytometry studies of P815 cells that were incubated with compound 5c at its IC50 concentration for 24 h showed induction

of apoptosis in a large percentage of cells. Compds. I and II were selected by the NCI for an in vivo anticancer hollow-fiber test, and received composite scores of 18 and 22, resp. These two compds. were subsequently evaluated for in vivo anticancer activity against the growth of a human advanced stage SC UACC-257 melanoma in skid mice. At a dose of 134 mg/kg administered IP, compound II gave a T/C value of 40% (for day 51),

and the median number of days of doubling tumor growth was 27.7, vs. 15.8 for untreated animals. For compound I, at 200 mg/kg, the T/C was 58% and the median number of days of doubling tumor growth was 20.0 vs. 8.7 for untreated animals. At these doses no toxicity or weight loss was observed for either compound Furthermore, compound II was not toxic to murine bone marrow cell growth in culture, at a dose that was toxic for the previously reported seco-CBI (cyclopropylbenzoindoline)-TMI (4).

IT 817623-44-2P

RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(design, synthesis, DNA binding, and anticancer properties of achiral seco-analogs of CC-1065 and the duocarmycins)

RN 817623-44-2 CAPLUS

CN 1-Piperazinecarboxylic acid, 4-methyl-,

4-(2-chloroethyl)-3-[[(5,6,7-trimethoxy-1H-indol-2-

yl)carbonyl]amino]phenyl ester (CA INDEX NAME)

OS.CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS

RECORD (10 CITINGS)

REFERENCE COUNT: 69 THERE ARE 69 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:780360 CAPLUS <<LOGINID::20091014>>

DOCUMENT NUMBER: 141:295859

TITLE: Preparation of N-aryl-1H-indole-2-carboxamides as

cytokine inhibitors

INVENTOR(S): Cirillo, Pier Francesco; Gao, Donghong Amy; Goldberg,

Daniel R.; Hammach, Abdelhakim; Hao, Ming-Hong; Kamhi, Victor Marc; Moss, Neil; Netherton, Matthew Russell; Qian, Kevin Chungeng; Ralph, Mark Stephen; Wu, Lifen;

Xiong, Zhaoming

PATENT ASSIGNEE(S): Boehringer Ingelheim Pharmaceuticals, Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 82 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20040186114	A1	20040923	US 2004-789354	20040227
US 7078419	B2	20060718		
AU 2004264409	A1	20050224	AU 2004-264409	20040302
CA 2518774	A1	20050224	CA 2004-2518774	20040302
WO 2005016918	A2	20050224	WO 2004-US6264	20040302
WO 2005016918	A3	20050407		
W: AE, AG, AL,	AM, A	T, AU, AZ, BA	A, BB, BG, BR, BW,	BY, BZ, CA, CH,

AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,

```
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
             ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
             SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
             TD, TG
     BR 2004008228
                                 20060221
                                             BR 2004-8228
                                                                     20040302
     EP 1631567
                                 20060308
                                             EP 2004-775820
                                                                     20040302
                           Α2
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, TR, BG, CZ, EE, HU, PL, SK
                                 20060412
     CN 1759114
                           Α
                                             CN 2004-80006351
                                                                     20040302
     JP 2006519861
                           Τ
                                 20060831
                                             JP 2006-508971
                                                                     20040302
                                             CN 2008-10083505
     CN 101239972
                                 20080813
                                                                     20040302
                           Α
     NZ 542775
                                             NZ 2004-542775
                                 20080829
                                                                     20040302
                           Α
     ZA 2005006242
                                 20060726
                                             ZA 2005-6242
                                                                     20050804
                           Α
     IN 2005DN03676
                                 20070824
                                             IN 2005-DN3676
                                                                     20050819
                           Α
     US 20060235017
                                 20061019
                                             US 2006-426603
                                                                     20060627
                           A1
     US 7335657
                           В2
                                 20080226
PRIORITY APPLN. INFO.:
                                             US 2003-453364P
                                                                  Ρ
                                                                     20030310
                                             US 2004-789354
                                                                  A1 20040227
                                             CN 2004-80006351
                                                                  A3 20040302
                                             WO 2004-US6264
                                                                  W 20040302
```

OTHER SOURCE(S): MARPAT 141:295859

GΙ

AB Title compds. I [wherein Ar = (un)substituted aryl; Q = N, (un)substituted CH; W = N, CH; X = CH2, O, S, (un)substituted NH; Y = O, SO0-2, (un)substituted CH2, CH=CH, NH; R3-R5 = independently H, halo, alkyl; R6 = a bond, O, O(CH2)1-5, CO, NH, CONH, S, (un)substituted alkyl, alkenyl,

acyl, heterocyclyl, aryl; R7 = H, alkyl; and pharmaceutically acceptable salts, acids, or isomers thereof] were prepared For example, a 9-step synthesis starting from 3-methyl-2-nitrophenol, di-Et oxalate, 5-tert-butyl-3-methanesulfonamido-2-methoxyaniline, 2,4-dichloropyrimidine, and 1-methylpiperazine gave II. I inhibit production of cytokines involved in inflammatory processes and are, thus, useful for treating diseases and pathol. conditions involving inflammation, such as chronic inflammatory disease (no data). The compds. are also useful for treating diseases or conditions related to oncol. and anticoagulant or fibrinolytic therapy (no data). Also disclosed are processes for preparing

these compds. and pharmaceutical compns. comprising them.

761428-77-7P, 1-Methyl-7-(2-methylaminopyrimidin-4-yloxy)-1Hindole-2-carboxylic acid N-[5-tert-butyl-2-methoxy-3-[[2-(morpholin-4-yl)ethyl]carbamoyl]phenyl]amide 761428-91-5P,
1-Methyl-7-(2-methylaminopyrimidin-4-yloxy)-1H-indole-2-carboxylic acid
N-[5-tert-butyl-2-methoxy-3-[[2-(morpholin-4-yl)ethyl]amino]phenyl]amide
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)

(cytokine inhibitor; preparation of indolecarboxamides as cytokine inhibitors for treatment of inflammatory diseases, cancer, and other conditions)

RN 761428-77-7 CAPLUS

CN 1H-Indole-2-carboxamide, N-[5-(1,1-dimethylethyl)-2-methoxy-3-[[[2-(4-morpholinyl)ethyl]amino]carbonyl]phenyl]-1-methyl-7-[[2-(methylamino)-4-pyrimidinyl]oxy]- (CA INDEX NAME)

RN 761428-91-5 CAPLUS

CN 1H-Indole-2-carboxamide, N-[5-(1,1-dimethylethyl)-2-methoxy-3-[[2-(4-morpholinyl)ethyl]amino]phenyl]-1-methyl-7-[[2-(methylamino)-4-pyrimidinyl]oxy]- (CA INDEX NAME)

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD

(2 CITINGS)

REFERENCE COUNT: 64 THERE ARE 64 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1998:745036 CAPLUS <<LOGINID::20091014>>

DOCUMENT NUMBER: 130:3775

TITLE: Preparation of

N - [2 - (4 -

carboxamidocyclohexyl)ethyl]tetrahydroisoquinolines as

dopamine D3 receptor ligands

INVENTOR(S): Branch, Clive Leslie; Johnson, Christopher Norbert;

Stemp, Geoffrey

PATENT ASSIGNEE(S): Smithkline Beecham PLC, UK

SOURCE: PCT Int. Appl., 98 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	PATENT NO.					KIND DATE				LICAT	ION	DATE					
WO	9850	 364			A1	_	1998	1112		WO 1	 1998-	 EP25	 83			 19980	 427
																, CZ,	
		DK,	EE,	ES,	FI,	GB,	GE,	GH,	GM,	GW,	HU,	ID,	IL,	IS,	JΡ	, KE,	KG,
		KP,	KR,	KΖ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN	, MW,	MX,
		NO,	NΖ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM	, TR,	TT,
		UA,	UG,	US,	UZ,	VN,	YU,	ZW									
	RW:	GH,	GM,	ΚE,	LS,	MW,	SD,	SZ,	UG,	ZW,	AT,	BE,	CH,	CY,	DΕ	, DK,	ES,
		FΙ,	FR,	GB,	GR,	ΙE,	ΙΤ,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF	, CG,	CI,
		CM,	GA,	GN,	ML,	MR,	ΝE,	SN,	TD,	ΤG							
CA	2288	899			A1		1998	1112		CA 1	L998-	2288	899			19980	427
AU	9876	518			Α		1998	1127		AU 1	L998-	7651	8			19980	427
AU	7254	91			В2		2000	1012									
EP	9832	44			A1		2000	0308		EP 1	L998-	9242	62			19980	427
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE	, MC,	PT,
			SI,														
	9902						2000	0421		TR 1	L999-	2724				19980	427
	2000						2001			HU 2	2000-	3608				19980	427
	2000		8 0		А3		2001										
	9809				Α		2001									19980	
	2002						2002									19980	
	9803				Α		1999				L998-					19980	
	9905				Α		1999			NO 1	L999-	5338				19991	102
	9910															19991	
	6465				В1		2002	1015		US 2	2000-	6563	79			20000	
IORIT	Y APP	LN.	INFO	.:												19970	
											L997-					19971	
											L998-					19980	
										US 1	L999-	4231	63		В1	19991	102

OTHER SOURCE(S): MARPAT 130:3775

AB R1CH2CH2ZNR2COR (Z = 1,4-cyclohexylene)[I; R = (un)substituted Ph, -heteroaryl, (E)-CH:CHPh, etc.; R1 = benzene ring-(un)substituted 1,2,3,4-tetrahydroisoquinolin-2-yl; R2 = H or alkyl] were prepared Thus, 8-(2-hydroxyethyl)-1,4-dioxaspiro[4.5]decane was oxidized and the product reductively aminated by 7-cyano-1,2,3,4-tetrahydroisoquinoline to give, after deprotection and reductive amination, cis- and trans-2-[2-(4-aminocyclohexyl)ethyl]-7-cyano-1,2,3,4-

tetrahydroisoquinoline. The latter mixture was treated with indole-2-carboxylic acid under amidation conditions to give trans-I (R = 2-indolyl, R1 = 7-cyano-1,2,3,4-tetrahydroisoquinolin-2-yl, R2 = H). Data for biol. activity of I were given.

IT 215802-29-2P 215802-51-0P 215803-53-5P 215803-62-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of $N-\{2-(4-carboxamidocyclohexyl)ethyl]$ tetrahydroisoquinolines as dopamine D3 receptor ligands)

RN 215802-29-2 CAPLUS

CN 1H-Indole-2-carboxamide, N-[trans-4-[2-(7-cyano-3,4-dihydro-2(1H)-isoquinolinyl)ethyl]cyclohexyl]-5-methoxy- (CA INDEX NAME)

Relative stereochemistry.

RN 215802-51-0 CAPLUS

CN 1H-Indole-2-carboxamide, N-[trans-4-[2-(7-cyano-3,4-dihydro-2(1H)-isoquinolinyl)ethyl]cyclohexyl]-6-methoxy- (CA INDEX NAME)

Relative stereochemistry.

RN 215803-53-5 CAPLUS

CN 1H-Indole-2-carboxamide, N-[trans-4-[2-(6-cyano-3,4-dihydro-2(1H)-isoquinolinyl)ethyl]cyclohexyl]-5-methoxy- (CA INDEX NAME)

Relative stereochemistry.

RN 215803-62-6 CAPLUS

CN 1H-Indole-2-carboxamide, N-[trans-4-[2-(6-cyano-3,4-dihydro-2(1H)-isoquinolinyl)ethyl]cyclohexyl]-6-methoxy- (CA INDEX NAME)

Relative stereochemistry.

OS.CITING REF COUNT: 15 THERE ARE 15 CAPLUS RECORDS THAT CITE THIS

RECORD (19 CITINGS)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=>